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(71) Applicant (for all designated States except US): AUSTRALIAN ARROW PTY LTD [AU/AU]; 65 Lathams Road, Carrum Downs, Victoria 3201 (AU).

(72) Inventor; and

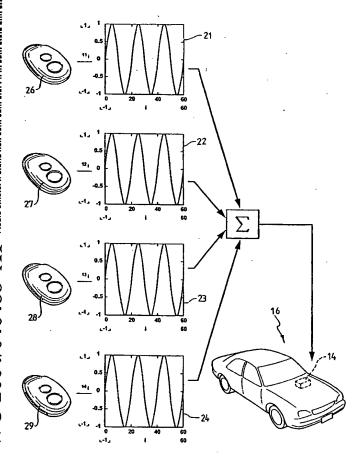
(75) Inventor/Applicant (for US only): CROWHURST, Peter,

Edward [AU/AU]; Unit 2, 9 Femlea Avenue, Rowville, Victoria 3178 (AU).

- (74) Agent: F B RICE & CO; 139-141 Rathdowne Street, Carlton South, Victoria 3053 (AU).
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(54) Title: PASSIVE ENTRY SYSTEM



(57) Abstract: A system to enable an authorized person access or entry or use of to a restricted area or location or apparatus includes a base station (14) that, on initiation, transmits one or more actuating signals, either at predetermined intervals or on the occurrence of a predefined event. The signals are received by any transponder (12) that is within range. Each transponder (26, 27, 28, 29) receiving the actuation signal reacts by transmitting a unique, coded response signal (21, 22, 23, 24) that is received by a receiver associated with the base station (14). A base station processor processes the received response signals (21, 22, 23, 24) and perform a Fourier transform and/or a spectral analysis on the received signal combination to develop an identification of the individual received response signals. The base station selects one of the identified response signals and authenticates the transponder (26, 27, 28, 29) responsible for the transmission of that selected response signal.